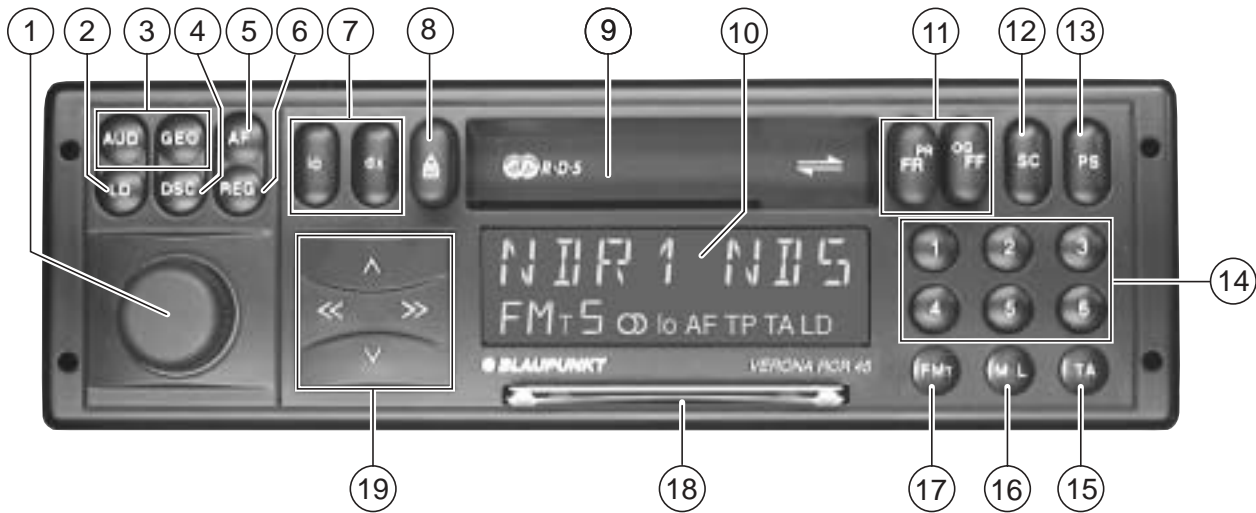


Radio / Cassette

Verona RCR 45

Operating instructions





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Short instructions

- ① On ↻ Off ↻
Volume ↻



This unit can also be switched on and off with the KeyCard ⑱.

Also, when being connected correctly, you may turn the radio on and off via the ignition of your car.

Use one of the following possibilities to continue operating the set when the ignition is switched off:

- Switch on/off with knob ①.
- Remove/insert the KeyCard.
- Press **AUD** ③.

When turning on the unit with the KeyCard or by pressing the **AUD** button, the system will start to play with the volume adjusted last.

When operating the unit with the ignition being switched off, the system will automatically shut down after one hour in order to avoid that the battery goes flat.

- ② **LD**

Loudness - When listening at a low level, the Loudness function creates a more natural sound by boosting the low frequency range.

To switch the Loudness on/off:

Press **LD**.

For more information, read chapter “DSC programming”.

- ③ **AUD/GEO**

AUD –

To adjust the treble and bass frequencies with the rocker switch.



- ^ Treble +
v Treble –
<< Bass –
>> Bass +

GEO –

To adjust the balance (left/right) and fader (front/rear) with the rocker switch.



- ^ Fader front
v Fader rear
<< Balance left
>> Balance right

To alter a setting,

- press **AUD** or **GEO** and then change the value with the rocker switch.

The adjusted value is indicated in the display.

The last setting will be stored automatically.

To finish the setting: Press **AUD** or **GEO**.

If the setting remains unchanged within 8 seconds, the display will switch back to the previous condition.

④ **DSC (Direct Software Control)**
 Use the DSC function to customise certain programmable, basic settings to suit your personal needs and preferences. See chapter “DSC programming” for more information.

⑤ **AF - Alternative frequency during RDS operation**
 When “AF” lights up in the display, the radio will automatically search for a frequency offering better reception of the same RDS programme.
 To switch AF on/off: Press **AF** briefly.

⑥ **REG**
REG ON / REG OFF
 With REG ON the system will only switch to a better alternative frequency if the latter belongs to a linked station offering the same regional programme (see “REG - regional programme”).
 To switch REG on or off: Press **REG** until “REG ON” or “REG OFF” appears in the display (BEEP tone).

⑦ **lo/dx**
 To alter the automatic seek tuning sensitivity.
 If “lo” is displayed, the radio will only pick up strong, local stations (low sensitivity).
 If “lo” does not light up, the radio will also pick up weaker, distant stations (high sensitivity).
To switch over: Press **lo** or **dx** briefly.
 For more information, see chapter “DSC programming”.

⑧ **Cassette removal**
 Press **⏏**.

⑨ **Cassette loading slot**
 Insert tape (side A or 1 up; the open side facing to the right).

⑩ **Display**
 Radio operation:



- NR1 NDS - Station abbreviation or frequency
- FM - Waveband
- T - Memory bank (I, II, T)
- 5 - Preset button (1 - 6)
- ⊕ - Stereo
- lo - Seek tuning sensitivity
- AF - Alternative RDS frequency
- TP - Traffic programme identifier
- TA - Priority for traffic programme stations
- LD - Loudness

Tape operation:



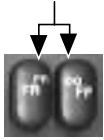
TR1--PLAY - Side 1 (or 2)

⑪ **PROG button/Fast winding**

To switch to the other side of the cassette tape:

Press both buttons simultaneously.

The display shows TR1-PLAY or TR2-PLAY.



Fast winding

FR : Fast rewind; stop by pressing FF.

FF : Fast forward; stop by pressing FR.

⑫ **SC**

Radio operation

Scan (sampling all stations to be received): Press **SC** briefly.

⑬ **PS**

Preset Scan (sampling all stations stored on the preset buttons): Press **PS** briefly.

⑭ **1, 2, 3, 4, 5, 6 - preset buttons**

You can store six stations on each FM memory bank (I, II, T).

To store a station: Press button during radio operation and hold down until the radio resumes play.

To recall a station: Select the waveband and on FM also the desired memory bank (press **FMT** button as many times as required). Then press the corresponding preset button briefly.

⑮ **TA** (priority for traffic announcements)

If "TA" is displayed, the system will play traffic stations only.

TA on/off: Press button.

⑯ **M•L**

To select the MW or LW waveband. Press button as many times until the desired band is adjusted.

⑰ **FMT** - FM, Travelstore

To switch between the FM memory banks I, II and "T" (Travelstore).

To switch over:

Press **FMT** as many times until the desired bank is indicated in the display.

To store the six most powerful stations automatically with Travelstore:

Store: Press **FMT**; seek tuning starts.

Recall: Press **FMT** as many times until the display shows "T". Then briefly press one of the preset buttons **1, 2, 3, 4, 5, or 6**.

18 **KeyCard theft-protection system**

To operate the set it is necessary that you have inserted the KeyCard.



For this, introduce the **KeyCard** into the slot with the contact area showing up (KeyCard tongue pulled out).

Read also the information under "Key-Card theft-protection system".

Flashing KeyCard tongue

When the car radio is turned off, the KeyCard tongue can be switched to flash for extra anti-theft protection. This feature can be switched on and off via DSC - LED.

19 **Rocker switch Seek tuning**



- ^ Up
- v Down
- << / >> Up/down in short intervals ("AF" must be switched off)
- << / >> To scroll through the broadcasting network when "AF" is activated (e.g. NDR1 ... NDR4).

Extra functions:

In the DSC mode:

Select and programme DSC functions.

Important notes

Precautions

Before starting to use your new car radio, please read the information on "Traffic safety" and "KeyCard theft-protection System" carefully.

Traffic safety

As the driver of a motor vehicle, it is your responsibility to pay attention to the traffic situation at all times. Never use your car radio in a way that could distract you.

Please keep in mind that you travel a distance of 14 m per second at a speed of only 50 km/h.

Should the traffic situation become particularly demanding, we advise you not to use the radio.

Always make sure that you are still able to hear any warning signals coming from outside of the vehicle, such as police or fire engine sirens, so that you can react accordingly.

Therefore, you should always select a moderate volume for playing your car radio while you are driving.

KeyCard theft-protection system

Installation/Connection

If you would like to install this equipment yourself or add any new components, please read the enclosed installation and connection instructions carefully.

Do not connect the loudspeaker outputs to ground!

Use only the accessory and replacement parts approved by Blaupunkt.

This car radio is supplied with one KeyCard as standard.

However, the unit can also be operated with a second card.

If you have lost or damaged your KeyCard, you can buy a new one from your specialised dealer.

When using two KeyCards, you can individually store the following functions:

Bass, treble, balance and fader settings, assignments of preset buttons, Loudness, TA (traffic announcement volume), BEEP volume.

In addition to this, the settings activated before switching the radio off, such as the waveband, station, TA priority, Loudness, AF, REG ON/OFF and seek tuning sensitivity, will also remain stored.

This ensures that the basic settings you have programmed will automatically be activated as soon as you have inserted your KeyCard.

Putting the unit into operation

- Turn on the set and introduce the KeyCard into the slot with the contact area showing up (KeyCard tongue pulled out).

The car radio is now ready for operation. If a wrong KeyCard is inserted, then "CARD ERR" will appear in the display. In this case please do not go on operating the set.

After approximately 10 seconds, the display will show "TURN OFF". Now turn off the set. When inserting a card of a different kind (like for example a credit card), the display will show "WRONG KC" for approximately 2 seconds.

Remove the wrong card and turn off the set. Do not make further adjustments until you have a correct KeyCard available.

Removing the KeyCard

Never pull out the KeyCard directly.

- First press the KeyCard in.

This releases the card and puts it in the proper position for being removed.

- Now you can pull it out.

"Defining" a second KeyCard/ Replacing a KeyCard

While operating the unit with the first KeyCard, you can "define" a second one to be also used with the set:

- Insert the first KeyCard and turn on the set.
- Press the **DSC** button and select "LEARN KC" with \wedge/\vee .

The display will switch to "CHANGE".

- Press the KeyCard in, which releases the card and puts it in the proper position for being removed.
- Remove the first KeyCard and insert the new one while “CHANGE” is still being displayed.

Now you can also use the new KeyCard for operating your unit.

A maximum of two cards can be used per set. When trying to “define” a third one, the system will automatically delete the access authorisation of that KeyCard which was not used for the “learning” process.

Displaying the radio pass data

You can use the KeyCard supplied with the unit to display the individual radio pass data such as the model name, the type number (7 6 ...) and the serial number:

- Press and hold down preset buttons **1** and **6** while switching on the unit.
- Press the **M•L** button within 2 seconds.

The radio pass data will move through the display several times.

To quit the function:

- Press any button.

Optical indication for extra security

When the car is stationary, the KeyCard tongue can be switched to flash for extra anti-theft security.

For this, the following requirements must be fulfilled:

Permanent 12 V supply and the + ignition lead must be connected correctly (as illustrated in the installations instructions).

“LED 1” must be adjusted in the DSC mode. Please refer to chapter “DSC programming - LED”.

Radio operation with RDS (Radio Data System)

The Radio Data System offers you more convenience when listening to FM radio stations.

More and more radio stations have begun to broadcast RDS information alongside their programmes.

As soon as a programme has been identified, the station name including a regional identifier, if applicable, will appear in the display, for example, NDR1 NDS (regional programme in Lower Saxony, Germany).

When RDS is activated, the station buttons become programme buttons. You now know exactly which programme you have tuned into, making it easy to find the desired station quickly.

But RDS offers you further advantages:

AF - Alternative frequency

The AF (Alternative Frequency) function makes sure that the strongest frequency of the currently selected programme is always tuned in automatically.

This function is activated when “AF” appears in the display.

In order to switch this function on or off,

- press the **AF** button briefly.

While searching for the strongest reception signal, the radio may switch to mute briefly. If “SEARCH” appears in the display when

switching on the radio or recalling one of the stored frequencies, the unit is automatically searching for an alternative frequency.

“SEARCH” will disappear from the display when the alternative frequency has been found or after the frequency band has been run through completely.

If the reception quality of the selected programme becomes too bad:

- Tune into another station.

REG - regional programme

Certain radio programmes are split up at times into regional programmes offering local information. The 1st programme broadcast by NDR, for example, offers programmes with different contents in the northern states of Germany Schleswig-Holstein, Hamburg and Lower Saxony at certain times of the day. If you are listening to one programme and move to an area where another linked regional programme becomes stronger, the unit will switch to that programme.

If you wish to continue listening to the first programme,

- press the **REG** button.
“REG ON” appears in the display.

If you leave the service area of the regional programme tuned into, or if you would like to

take advantage of the full RDS service, switch to “REG OFF”.

- Press the **REG** button briefly.

When active, “REG ON” will be briefly displayed each time the radio is switched on.

Selecting a waveband

With this car radio you can select between the following wavebands:

FM 87.5 - 108 MHz

MW 531 - 1602 kHz

LW 153 - 279 kHz

- Select the desired waveband by pressing the **FMT** or **M•L** button.

To switch between MW and LW:

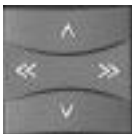
- Press **M•L**.

Automatic tuning \wedge/\vee

- Press \wedge/\vee ; the car radio will automatically search for the next station.

When keeping the upper or lower part \wedge/\vee of the rocker switch depressed, seek tuning will speed up in upwards or downwards direction.

Automatic tuning



- ▲ Up
- ▼ Down
- << / >> Up/down in short intervals
(“AF” must be switched off)
- << / >> To scroll through the broadcasting
network when “AF” is activated
(e.g. NDR1 ... NDR4).

Manual tuning << >>

(prerequisite: **AF** is switched off!)

- Press << >>; the frequency will change in short intervals in downwards or upwards direction.

When holding the right or left part of the rocker switch pressed down, the frequency scan is speeded up.

Scrolling through the broadcasting network (only FM)

You can use the << >> buttons to tune in stations of your reception area.

If several programmes of one broadcasting network can be received, you can scroll through them in forwards direction pressing >>, or backwards using the << button, e.g. NDR 1, 2, 3, 4, N-JOY (North German broadcaster).

For this it is necessary that the stations have been received at least once and that “AF” has been activated before (lights up in the display).

For this purpose, you may start Travelstore seek operation:

- Press **FMT** for 2 seconds; the system starts to run through the frequency band.

If “AF” does not light up,

- press **AF**.

With this, the requirements for selecting stations with << >> are fulfilled.

Changing the memory bank (FM)

You can shift between the memory banks I, II and T in order to store stations and recall them later.

The currently selected memory bank is indicated in the display.

- Press the **FMT** button as many times until the desired memory bank lights up in the display.

Storing stations

On FM, you can store six stations on the preset buttons **1 to 6** for each of the memory banks I, II and T.

On MW/LW, you can store six stations each.

- Select the waveband with **FMT** or **M•L** and on FM also the desired memory bank (with **FMT**).
- Tune in a station with the rocker switch (either automatically or manually).
- Press the desired preset button until the radio resumes play after the muting (takes approximately 2 seconds, confirmed by beep).

Now the station has been stored.

The activated preset button is indicated in the display.

Notice:

Should you tune in a station which has already been stored before, the corresponding preset button and the memory bank will briefly flash in the display if you have selected another memory bank.

Automatically storing the strongest stations with Travelstore

You can automatically store the six most powerful FM stations of your current reception area sorted according to their signal strength. This function is particularly convenient on longer trips.

- Press the **FMT** button for more than 2 seconds.

The radio will search for the strongest FM stations and store them on the memory bank T (Travelstore). When this process has been completed, the radio will play the first station. If desired, stations can also be stored manually on the Travelstore bank (see “Storing stations”).

Recalling stored stations

You can recall any stored station at the touch of a button.

- Select the waveband by pressing **FMT** or **M•L**. On FM, also choose the corresponding memory bank by pressing the **FMT** button as many times until the desired bank appears in the display.
- Press the corresponding preset button briefly to recall the station.

Scanning stored stations with Preset Scan

You can have all of the stored stations played briefly on all wavebands.

On FM, you can scan the stations of the Travelstore memory bank or of the two other storage levels.

- Select the waveband.
- On FM, choose Travelstore or another memory bank using the **FMT** button.

To start Preset Scan:

- Press **PS**.

The stations will be played for approximately 8 seconds each.

The positions blinking in the display show you the memory bank and preset position of the currently scanned station.

To select a station currently being scanned and switch off Preset Scan:

- Press **PS** briefly.

Scanning stations with Radio-Scan

Beginning with the station currently tuned in, you can scan the waveband. The radio will play each station for 8 seconds.

To start the scan:

- Press **SC** briefly.

The scanned frequency or the station name will start flashing in the display. During the actual scanning process “SCAN” will be displayed.

To select a station currently being scanned and switch off the scan function:

- Press **SC** briefly.

If no station is selected, the scan function will be automatically switched off after the frequency band has been run through completely. The unit will tune in the station listened to before starting the scan.

Selecting the seek tuning sensitivity

You can alter the automatic seek tuning sensitivity.

If “lo” is displayed, the radio will only pick up strong, local stations (low sensitivity).

If “lo” does not light up, the radio will also pick up weaker, distant stations (high sensitivity).

To switch over,

- Press **lo** or **dx**.


On top of this, the sensitivity levels can be adjusted separately for lo and dx (see chapter “DSC programming”).

Receiving traffic programme stations with RDS-EON

Switching from stereo to mono (FM)

If reception is poor, you may get better sound quality by switching to mono:

- Press the **Io** button for approximately 2 seconds.

With mono playback, the stereo sign  will disappear from the display.

Each time the radio is switched on, stereo playback is activated.

The unit will automatically switch to mono if the received signal is not strong enough for stereo playback.

Many FM broadcasters offer traffic messages for their service area at regular intervals. All traffic programme stations transmit a special carrier signal alongside their programmes, which is decoded by your car radio. If this signal is identified, "TP" will appear in the display (**Traffic Programme**).

In addition to these, there are also stations which do not actually transmit traffic programmes themselves, but by using RDS-EON they offer the possibility to receive the traffic messages broadcast by another traffic programme station in the same radio network. If you listen to one of these stations (e.g. NDR3), "TP" will appear in the display provided the priority for traffic programme stations has been activated, i.e. "TA" must be displayed.

If a traffic announcement is broadcast, the radio will automatically switch to the linked traffic programme station (in this case, NDR2) for the duration of the message and return to the original programme (NDR3) afterwards.

Traffic announcement priority on/off

If the priority for traffic announcement programmes is activated, "TA" will light up in the display.

To switch the priority on or off:

- Press the **TA** button.

When pressing **TA** while a message is being broadcast, this message will be interrupted. The unit will then switch back to the previous condition. The priority for other traffic messages remains active.

Warning beep

If you leave the reception area of the traffic programme station currently tuned into, you will hear a warning beep after approximately 30 seconds.

This alarm tone will also be released when pressing a preset button which has no traffic programme allocated to it.

Switching the warning beep off

a) Tune into another station offering traffic information:

- Press the rocker switch or
- a preset button which has a traffic programme station allocated to it.

Alternatively:

b) Switch off the priority for traffic announcements:

- Press **TA**.
"TA" will disappear from the display.

Tape operation

Automatic seek tuning start (tape operation)

When leaving the reception area of the tuned in traffic programme station while listening to a tape, the system will automatically start searching for a new TA programme.

If no such station is found within approximately 30 seconds, tape operation will be stopped and a warning beep will sound.

To switch the warning beep off, proceed as described above.

Adjusting the volume for traffic announcements and the warning beep

This volume was preset at the factory.


You can alter the value using the DSC function (see “DSC programming, TA”).

Inserting a tape

- Turn on the set.
- Insert a tape.

Insert the tape with side A or 1 showing up, the open side facing to the right.




 = Press to eject the tape.

The tape will be played in the direction used last.

“TR1-PLAY” in the display means that track 1 or A is being played.

Removing a tape

- Press .
The cassette will eject.

Fast Forward/Rewind

Fast Forward

- Press **FF**.
At the end of a tape side, the mechanism changes directions automatically to play the other side.

Stopping Fast Forward operation

- Press **FR**.

Fast Rewind

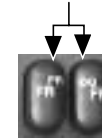
- Press **FR**.
At the beginning of the tape, the mechanism will automatically start playback.

Stopping Fast Rewind operation

- Press **FF**.

To switch to the other side of the cassette tape:

Press both buttons simultaneously.
The display shows TR1-PLAY or TR2-PLAY.



Fast winding

FR : Fast rewind; stop by pressing **FF**.
FF : Fast forward; stop by pressing **FR**.

DSC programming

PROG selector

(To change the tape direction during cassette playback)

- Press **FR** and **FF** simultaneously.

At the end of a tape side, the mechanism changes directions automatically to play the other side (Autoreverse). The display shows "TR1-PLAY" for track (side) 1 or A or "TR2-PLAY" for track 2 or B.

Notice:

If there is too much tension on the tape during playback, the set may switch over by itself before having reached the end of the tape side. In this case check the condition of the cassette tape. Sometimes it helps to rewind it completely.

DSC (Direct Software Control) allows you to customise certain programmable, basic settings to suit your personal needs and preferences and then store them.

The basic settings for this audio equipment were made at the factory. In the following you can find an overview of these settings, so that you can always reset to these if desired.

If you wish to alter any of the programming,

- press **DSC**.

The display will show you the adjusted condition.

Use the rocker switch to select and adjust the functions described in the following.



- ^ / v Select function
- << Adjust value -
- >> Adjust value +

TA VOL

To adjust the traffic announcement volume from between 1 to 9. The message will then come through at this volume. (1 = low)

BEEP

Confirmation tone for all functions which require a button to be pressed for more than 2 seconds. The volume can be adjusted from between 0 to 9. (0 = off) Each alteration of this value is confirmed by a beep tone of the corresponding volume.

LED (code)

You can adjust the LED ⁽¹⁸⁾ to flash for extra anti-theft protection.

LED 1 - LED always flashes when the unit has been switched off via the ignition.

LED 0 - No flashing.

LOUD

Loudness - When listening at a low level, the Loudness function creates a more natural sound by boosting the low frequency range.

LOUD 1 - Low boost

LOUD 6 - Max. boost

Appendix

RM (Radio Monitor)
With RM-ON, the unit will automatically switch to the tuner whenever the cassette is fast winding.
RM-OFF - The function is switched off.

LOCAL (lo)
To adjust the seek tuning sensitivity for local reception.
LOCAL 1 - high sensitivity
LOCAL 3 - low sensitivity

DIS (dx)
To adjust the seek tuning sensitivity for distant reception.
DIS. 1- high sensitivity
DIS. 3- low sensitivity

LEARN KC To “define” a second Key-Card for use with the set. Please read the information under “KeyCard theft-protection system”.

To quit the DSC programming mode and store the adjustment:

- Press **DSC**.

If the setting remains unchanged within 8 seconds, the system will automatically store the last adjustment. The display will switch back to the previous condition.

Overview of the DSC factory settings

TA VOL	: 4
BEEP	: 3
LED (Code)	: 1
LOUD	: 4
RM	: OFF
LOCAL	: 1
DIS	: 1

Care notes

Mechanism/cassette tapes

To avoid possible problems, you should not use cassette tapes longer than 60 or 90 minutes (C60/C90). Store your tapes in a cool place away from dirt, dust and temperatures exceeding 50 ° Celsius. Allow very cold tapes to warm up before playing them in order to avoid uneven tape transport. After approximately 100 hours of use, dust particles collected on the playback head or roller may lead to tape run problems and sound distortions.

Use a head cleaning tape to remove normal dirt build-up. For tougher cases, use a cotton swab (Q-Tip) soaked with alcohol. Do not attempt to clean by inserting a hard object into the player!

Specifications

Amplifier

Output power: 4 x 6 W RMS power
acc. to DIN 45324/3.1
or
4 x 8 W max. power acc.
to DIN 45324/3.2

Tuner

Wavebands

FM : 87.5 – 108 MHz
MW : 531 – 1602 kHz
LW : 153 – 279 kHz

FM sensitivity: 1.0 μ V at 26 dB
signal-to-noise ratio

FM frequency
response: 35 - 16 000 Hz

Tape player

Frequency
response: 35 - 16 000 Hz

Subject to modifications!

Blaupunkt-Werke GmbH
Bosch Gruppe

